

## Messier Objects

| ObjectNum | Name   | Type                   | Constellation   | RAHour | RAMinute | DecSign | DecDeg | DecMinute | Magnitude      | Info | Distance (ly) |
|-----------|--|------------------------|-----------------|--------|----------|---------|--------|-----------|----------------|------|---------------|
| 1         | NGC 1952 Crab Nebula                           | Supernova Remnant      | Taurus          | 5      | 34.5     | +       | 22     | 18.4      | Size: 6.0x4.0  |      | 6,300         |
| 2         | NGC 7089                                       | Globular Cluster       | Aquarius        | 21     | 33.5     | -       | 0      | 49.6.5    | Size: 12.9     |      | 37,500        |
| 3         | NGC 5272                                       | Globular Cluster       | Canes Venatici  | 13     | 42.2     | +       | 28     | 23.6.2    | Size: 16.2     |      | 33,900        |
| 4         | NGC 6121                                       | Globular Cluster       | Scorpius        | 16     | 23.6     | -       | 26     | 32.5.6    | Size: 26.3     |      | 7,200         |
| 5         | NGC 5904                                       | Globular Cluster       | Serpens Caput   | 15     | 18.6     | +       | 2      | 5.5.6     | Size: 17.4     |      | 24,500        |
| 6         | NGC 6405 Butterfly Cluster                     | Open Cluster           | Scorpius        | 17     | 40.1     | -       | 32     | 13.5.3    | Size: 25       |      | 2,000         |
| 7         | NGC 6475 Ptolemy's Cluster                     | Open Cluster           | Scorpius        | 17     | 53.9     | -       | 34     | 49.4.1    | Size: 80       |      | 800           |
| 8         | NGC 6523 Lagoon Nebula                         | Diffuse Nebula         | Sagittarius     | 18     | 3.8      | -       | 24     | 23.6      | Size: 90x40    |      | 5,200         |
| 9         | NGC 6333                                       | Globular Cluster       | Ophiucus        | 17     | 19.2     | -       | 18     | 31.7.7    | Size: 9.3      |      | 26,700        |
| 10        | NGC 6254                                       | Globular Cluster       | Ophiucus        | 16     | 57.1     | -       | 4      | 6.6.6     | Size: 15.1     |      | 14,400        |
| 11        | NGC 6705 Wild Duck Cluster                     | Open Cluster           | Scutum          | 18     | 51.1     | -       | 6      | 16.6.3    | Size: 14       |      | 6,000         |
| 12        | NGC 6218                                       | Globular Cluster       | Ophiucus        | 16     | 47.2     | -       | 1      | 57.6.7    | Size: 14.5     |      | 16,000        |
| 13        | NGC 6205 Hercules Globular Cluster             | Globular Cluster       | Hercules        | 16     | 41.7     | +       | 36     | 28.5.8    | Size: 16.6     |      | 22,800        |
| 14        | NGC 6402                                       | Globular Cluster       | Ophiucus        | 17     | 37.6     | -       | 3      | 15.7.6    | Size: 11.7     |      | 27,400        |
| 15        | NGC 7078                                       | Globular Cluster       | Pegasus         | 21     | 30       | +       | 12     | 10.6.2    | Size: 12.3     |      | 33,600        |
| 16        | NGC 6611 Eagle Nebula Cluster                  | Open Cluster           | Serpens Claudia | 18     | 18.8     | -       | 13     | 47.6.4    | Size: 7        |      | 7,000         |
| 17        | NGC 6618 Omega, Swan, Horseshoe Nebula         | Diffuse Nebula         | Sagittarius     | 18     | 20.8     | -       | 16     | 11.7      | Size: 11       |      | 5,000         |
| 18        | NGC 6613                                       | Open Cluster           | Sagittarius     | 18     | 19.9     | -       | 17     | 8.7.5     | Size: 9        |      | 4,900         |
| 19        | NGC 6273                                       | Globular Cluster       | Ophiucus        | 17     | 2.6      | -       | 26     | 16.6.8    | Size: 13.5     |      | 27,100        |
| 20        | NGC 6514 Trifid Nebula                         | Diffuse Nebula         | Sagittarius     | 18     | 2.3      | -       | 23     | 2.9       | Size: 28       |      | 5,200         |
| 21        | NGC 6531                                       | Open Cluster           | Sagittarius     | 18     | 4.6      | -       | 22     | 30.6.5    | Size: 13       |      | 4,250         |
| 22        | NGC 6656                                       | Globular Cluster       | Sagittarius     | 18     | 36.4     | -       | 23     | 54.5.1    | Size: 24       |      | 10,100        |
| 23        | NGC 6494                                       | Open Cluster           | Sagittarius     | 17     | 56.8     | -       | 19     | 1.6.9     | Size: 27       |      | 2,150         |
| 24        | NGC 6603 Milky Way Patch                       | Star Cloud             | Sagittarius     | 18     | 18.4     | -       | 18     | 25.4.6    | Size: 90       |      | 10,000        |
| 25        | IC 4725  | Open Cluster           | Sagittarius     | 18     | 31.7     | -       | 19     | 14.6.5    | Size: 40       |      | 2,000         |
| 26        | NGC 6694                                       | Open Cluster           | Scutum          | 18     | 45.2     | -       | 9      | 24.8      | Size: 15       |      | 5,000         |
| 27        | NGC 6853 Dumbbell Nebula                       | Planetary Nebula       | Vulpecula       | 19     | 59.6     | +       | 22     | 43.7.4    | Size: 8.0x5.7  |      | 1,250         |
| 28        | NGC 6626                                       | Globular Cluster       | Sagittarius     | 18     | 24.5     | -       | 24     | 52.6.8    | Size: 11.2     |      | 17,900        |
| 29        | NGC 6913                                       | Open Cluster           | Cygnus          | 20     | 23.9     | +       | 38     | 32.7.1    | Size: 7        |      | 4,000         |
| 30        | NGC 7099                                       | Globular Cluster       | Capricornus     | 21     | 40.4     | -       | 23     | 11.7.2    | Size: 11       |      | 24,800        |
| 31        | NGC 224 Andromeda Galaxy                       | Spiral Galaxy          | Andromeda       | 0      | 42.7     | +       | 41     | 16.3.4    | Size: 178x63   |      | 2,900,000     |
| 32        | NGC 221 Satellite of M31                       | Elliptical Galaxy      | Andromeda       | 0      | 42.7     | +       | 40     | 52.8.1    | Size: 8x6      |      | 2,900,000     |
| 33        | NGC 598 Triangulum/Pinwheel Galaxy             | Spiral Galaxy          | Triangulum      | 1      | 33.9     | +       | 30     | 39.5.7    | Size: 73x45    |      | 3,000,000     |
| 34        | NGC 1039                                       | Open Cluster           | Perseus         | 2      | 42       | +       | 42     | 47.5.5    | Size: 35       |      | 1,400         |
| 35        | NGC 2168                                       | Open Cluster           | Gemini          | 6      | 8.9      | +       | 24     | 20.5.3    | Size: 28       |      | 2,800         |
| 36        | NGC 1960                                       | Open Cluster           | Auriga          | 5      | 36.1     | +       | 34     | 8.6.3     | Size: 12       |      | 4,100         |
| 37        | NGC 2099                                       | Open Cluster           | Auriga          | 5      | 52.4     | +       | 32     | 33.6.2    | Size: 24       |      | 4,400         |
| 38        | NGC 1912                                       | Open Cluster           | Auriga          | 5      | 28.7     | +       | 35     | 50.7.4    | Size: 21       |      | 4,200         |
| 39        | NGC 7092                                       | Open Cluster           | Cygnus          | 21     | 32.2     | +       | 48     | 26.5.2    | Size: 32       |      | 825           |
| 40        | Winecke 4                                      | Double Star            | Ursa Major      | 12     | 22.2     | +       | 58     | 5.9 & 9.3 | Sep: 49 arcsec |      | 510           |
| 41        | NGC 2287                                       | Open Cluster           | Canis Major     | 6      | 47       | -       | 20     | 44.4.6    | Size: 38       |      | 2,300         |
| 42        | NGC 1976 Great Orion Nebula                    | Diffuse Nebula         | Orion           | 5      | 35.4     | -       | 5      | 27.4      | Size: 85x60    |      | 1,600         |
| 43        | NGC 1982 de Mairan's Nebula                    | Diffuse Nebula         | Orion           | 5      | 35.6     | -       | 5      | 16.9      | Size: 20x15    |      | 1,600         |
| 44        | NGC 2632 Beehive Cluster (Praesepe)            | Open Cluster           | Cancer          | 8      | 40.1     | +       | 19     | 59.3.7    | Size: 95       |      | 577           |
| 45        | Pleiades, Subaru, Seven Sisters                | Open Cluster           | Taurus          | 3      | 47       | +       | 24     | 7.2.1.6   | Size: 110      |      | 380           |
| 46        | NGC 2437                                       | Open Cluster           | Puppis          | 7      | 41.8     | -       | 14     | 49.6      | Size: 27       |      | 5,400         |
| 47        | NGC 2422                                       | Open Cluster           | Puppis          | 7      | 36.6     | -       | 14     | 30.5.2    | Size: 30       |      | 1,600         |
| 48        | NGC 2548                                       | Open Cluster           | Hydra           | 8      | 13.8     | -       | 5      | 48.5.5    | Size: 54       |      | 1,500         |
| 49        | NGC 4472                                       | Elliptical Galaxy      | Virgo           | 12     | 29.8     | +       | 8      | 0.8.4     | Size: 9x7.5    |      | 60,000,000    |
| 50        | NGC 2323                                       | Open Cluster           | Monoceros       | 7      | 3.2      | -       | 8      | 20.6.3    | Size: 16       |      | 3,000         |
| 51        | NGC 5194 Whirlpool Galaxy                      | Spiral Galaxy          | Canes Venatici  | 13     | 29.9     | +       | 47     | 12.8.4    | Size: 11x7     |      | 37,000,000    |
| 52        | NGC 7654                                       | Open Cluster           | Cassiopeia      | 23     | 24.2     | +       | 61     | 35.7.3    | Size: 13       |      | 5,000         |
| 53        | NGC 5024                                       | Globular Cluster       | Coma Berenices  | 13     | 12.9     | +       | 18     | 10.7.6    | Size: 12.6     |      | 56,400        |
| 54        | NGC 6715                                       | Globular Cluster       | Sagittarius     | 18     | 55.1     | -       | 30     | 29.7.6    | Size: 9.1      |      | 82,800        |
| 55        | NGC 6809                                       | Globular Cluster       | Sagittarius     | 19     | 40       | -       | 30     | 58.6.3    | Size: 19       |      | 16,600        |
| 56        | NGC 6779                                       | Globular Cluster       | Lyra            | 19     | 16.6     | +       | 30     | 11.8.3    | Size: 7.1      |      | 31,600        |
| 57        | NGC 6720 Ring Nebula                           | Planetary Nebula       | Lyra            | 18     | 53.6     | +       | 33     | 2.8.8     | Size: 1.4x1    |      | 4,100         |
| 58        | NGC 4579                                       | Spiral Galaxy          | Virgo           | 12     | 37.7     | +       | 11     | 49.9.7    | Size: 5.5x4.5  |      | 60,000,000    |
| 59        | NGC 4621                                       | Elliptical Galaxy      | Virgo           | 12     | 42       | +       | 11     | 39.9.6    | Size: 5x3.5    |      | 60,000,000    |
| 60        | NGC 4649                                       | Elliptical Galaxy      | Virgo           | 12     | 43.7     | +       | 11     | 33.8.8    | Size: 7x6      |      | 60,000,000    |
| 61        | NGC 4303                                       | Spiral Galaxy          | Virgo           | 12     | 21.9     | +       | 4      | 28.9.7    | Size: 6x5.5    |      | 60,000,000    |
| 62        | NGC 6266                                       | Globular Cluster       | Ophiucus        | 17     | 1.2      | -       | 30     | 7.6.5     | Size: 14.1     |      | 21,500        |
| 63        | NGC 5055 Sunflower Galaxy                      | Spiral Galaxy          | Canes Venatici  | 13     | 15.8     | +       | 42     | 2.8.6     | Size: 10x6     |      | 37,000,000    |
| 64        | NGC 4826 Blackeye Galaxy                       | Spiral Galaxy          | Coma Berenices  | 12     | 56.7     | +       | 21     | 41.8.5    | Size: 9.3x5.4  |      | 19,000,000    |
| 65        | NGC 3623                                       | Spiral Galaxy          | Leo             | 11     | 18.9     | +       | 13     | 5.9.3     | Size: 8x1.5    |      | 35,000,000    |
| 66        | NGC 3627                                       | Spiral Galaxy          | Leo             | 11     | 20.2     | +       | 12     | 59.8.9    | Size: 8x2.5    |      | 35,000,000    |
| 67        | NGC 2682                                       | Open Cluster           | Cancer          | 8      | 50.4     | +       | 11     | 49.6.1    | Size: 30       |      | 2,700         |
| 68        | NGC 4590                                       | Globular Cluster       | Hydra           | 12     | 39.5     | -       | 26     | 45.7.8    | Size: 12       |      | 33,300        |
| 69        | NGC 6637                                       | Globular Cluster       | Sagittarius     | 18     | 31.4     | -       | 32     | 21.7.6    | Size: 7.1      |      | 26,700        |
| 70        | NGC 6681                                       | Globular Cluster       | Sagittarius     | 18     | 43.2     | -       | 32     | 18.7.9    | Size: 7.8      |      | 28,000        |
| 71        | NGC 6838                                       | Globular Cluster       | Sagitta         | 19     | 53.8     | +       | 18     | 47.8.3    | Size: 7.2      |      | 11,700        |
| 72        | NGC 6981                                       | Globular Cluster       | Aquarius        | 20     | 53.5     | -       | 12     | 32.9.3    | Size: 5.9      |      | 52,800        |
| 73        | NGC 6994 Group of 4 stars                      | Group/Asterism         | Aquarius        | 20     | 59       | -       | 12     | 38.9      | Size: 2.8      |      | 2,000         |
| 74        | NGC 628  | Spiral Galaxy          | Pisces          | 1      | 36.7     | +       | 15     | 47.9.4    | Size: 10.2x9.5 |      | 35,000,000    |
| 75        | NGC 6864                                       | Globular Cluster       | Sagittarius     | 20     | 6.1      | -       | 21     | 55.8.5    | Size: 6        |      | 57,700        |
| 76        | NGC 650 Little Dumbell, Cork, Butterfly Nebula | Planetary Nebula       | Perseus         | 1      | 42.3     | +       | 51     | 34.10.1   | Size: 2.7x1.8  |      | 3,400         |
| 77        | NGC 1068 Cetus A                               | Spiral Galaxy          | Cetus           | 2      | 42.7     | +       | 0      | 1.8.9     | Size: 7x6      |      | 60,000,000    |
| 78        | NGC 2068                                       | Diffuse Nebula         | Orion           | 5      | 46.7     | +       | 0      | 3.8.3     | Size: 8x6      |      | 1,600         |
| 79        | NGC 1904                                       | Globular Cluster       | Lepus           | 5      | 24.5     | -       | 24     | 33.7.7    | Size: 8.7      |      | 41,100        |
| 80        | NGC 6093                                       | Globular Cluster       | Scorpius        | 16     | 17       | -       | 22     | 59.7.3    | Size: 8.9      |      | 27,400        |
| 81        | NGC 3031 Bode's Galaxy                         | Spiral Galaxy          | Ursa Major      | 9      | 55.6     | +       | 69     | 4.6.9     | Size: 21x10    |      | 12,000,000    |
| 82        | NGC 3034 Cigar Galaxy                          | Irregular Galaxy       | Ursa Major      | 9      | 55.8     | +       | 69     | 41.8.4    | Size: 9.x4     |      | 12,000,000    |
| 83        | NGC 5236 Southern Pinwheel Galaxy              | Spiral Galaxy          | Hydra           | 13     | 37       | -       | 29     | 52.7.6    | Size: 11x10    |      | 15,000,000    |
| 84        | NGC 4374                                       | Lenticular (S0) Galaxy | Virgo           | 12     | 25.1     | +       | 12     | 53.9.1    | Size: 5        |      | 60,000,000    |
| 85        | NGC 4382                                       | Lenticular (S0) Galaxy | Coma Berenices  | 12     | 25.4     | +       | 18     | 11.9.1    | Size: 7.1x5.2  |      | 60,000,000    |
| 86        | NGC 4406                                       | Lenticular (S0) Galaxy | Virgo           | 12     | 26.2     | +       | 12     | 57.8.9    | Size: 7.5x5.5  |      | 60,000,000    |

## Messier Objects

| ObjectNum | Name                     | Type                   | Constellation  | RAHour | RAMinute | DecSign | DecDeg | DecMinute | Magnitude | Info          | Distance (ly) |
|-----------|--------------------------|------------------------|----------------|--------|----------|---------|--------|-----------|-----------|---------------|---------------|
| 87        | NGC 4486 Virgo A         | Elliptical Galaxy      | Virgo          | 12     | 30.8     | +       | 12     | 24        | 8.6       | Size: 7       | 60,000,000    |
| 88        | NGC 4501                 | Spiral Galaxy          | Coma Berenices | 12     | 32       | +       | 14     | 25        | 9.6       | Size: 7x4     | 60,000,000    |
| 89        | NGC 4552                 | Elliptical Galaxy      | Virgo          | 12     | 35.7     | +       | 12     | 33        | 9.8       | Size: 4       | 60,000,000    |
| 90        | NGC 4569                 | Spiral Galaxy          | Virgo          | 12     | 36.8     | +       | 13     | 10        | 9.5       | Size: 9.5x4.5 | 60,000,000    |
| 91        | NGC 4548                 | Spiral Galaxy          | Coma Berenices | 12     | 35.4     | +       | 14     | 30        | 10.2      | Size: 5.4x4.4 | 60,000,000    |
| 92        | NGC 6341                 | Globular Cluster       | Hercules       | 17     | 17.1     | +       | 43     | 8         | 6.4       | Size: 11.2    | 26,400        |
| 93        | NGC 2447                 | Open Cluster           | Puppis         | 7      | 44.6     | -       | 23     | 52        | 6         | Size: 22      | 3,600         |
| 94        | NGC 4736                 | Spiral Galaxy          | Canes Venatici | 12     | 50.9     | +       | 41     | 7         | 8.2       | Size: 7x3     | 14,500,000    |
| 95        | NGC 3351                 | Spiral Galaxy          | Leo            | 10     | 44       | +       | 11     | 42        | 9.7       | Size: 4.4x3.3 | 38,000,000    |
| 96        | NGC 3368                 | Spiral Galaxy          | Leo            | 10     | 46.8     | +       | 11     | 49        | 9.2       | Size: 6x4     | 38,000,000    |
| 97        | NGC 3587 Owl Nebula      | Planetary Nebula       | Ursa Major     | 11     | 14.8     | +       | 55     | 1         | 9.9       | Size: 3.4x3.3 | 2,600         |
| 98        | NGC 4192                 | Spiral Galaxy          | Coma Berenices | 12     | 13.8     | +       | 14     | 54        | 10.1      | Size: 9.5x3.2 | 60,000,000    |
| 99        | NGC 4254                 | Spiral Galaxy          | Coma Berenices | 12     | 18.8     | +       | 14     | 25        | 9.9       | Size: 5.4x4.8 | 60,000,000    |
| 100       | NGC 4321                 | Spiral Galaxy          | Coma Berenices | 12     | 22.9     | +       | 15     | 49        | 9.3       | Size: 7x6     | 60,000,000    |
| 101       | NGC 5457 Pinwheel Galaxy | Spiral Galaxy          | Ursa Major     | 14     | 3.2      | +       | 54     | 21        | 7.9       | Size: 22      | 27,000,000    |
| 102       | NGC 5866 Spindle Galaxy  | Lenticular (S0) Galaxy | Draco          | 15     | 6.5      | +       | 55     | 46        | 9.9       | Size: 5.2x2.3 | 40,000,000    |
| 103       | NGC 581                  | Open Cluster           | Cassiopeia     | 1      | 33.2     | +       | 60     | 42        | 7.4       | Size: 6       | 8,000         |
| 104       | NGC 4594 Sombrero Galaxy | Spiral Galaxy          | Virgo          | 12     | 40       | -       | 11     | 37        | 8         | Size: 9x4     | 50,000,000    |
| 105       | NGC 3379                 | Elliptical Galaxy      | Leo            | 10     | 47.8     | +       | 12     | 35        | 9.3       | Size: 2       | 38,000,000    |
| 106       | NGC 4258                 | Spiral Galaxy          | Canes Venatici | 12     | 19       | +       | 47     | 18        | 8.4       | Size: 19x8    | 25,000,000    |
| 107       | NGC 6171                 | Globular Cluster       | Ophiucus       | 16     | 32.5     | -       | 13     | 3         | 7.9       | Size: 10      | 19,600        |
| 108       | NGC 3556                 | Spiral Galaxy          | Ursa Major     | 11     | 11.5     | +       | 55     | 40        | 10        | Size: 8x1     | 45,000,000    |
| 109       | NGC 3992                 | Spiral Galaxy          | Ursa Major     | 11     | 57.6     | +       | 53     | 23        | 9.8       | Size: 7x4     | 55,000,000    |
| 110       | NGC 205 Satellite of M31 | Elliptical Galaxy      | Andromeda      | 0      | 40.4     | +       | 41     | 41        | 8.5       | Size: 17x10   | 2,900,000     |