

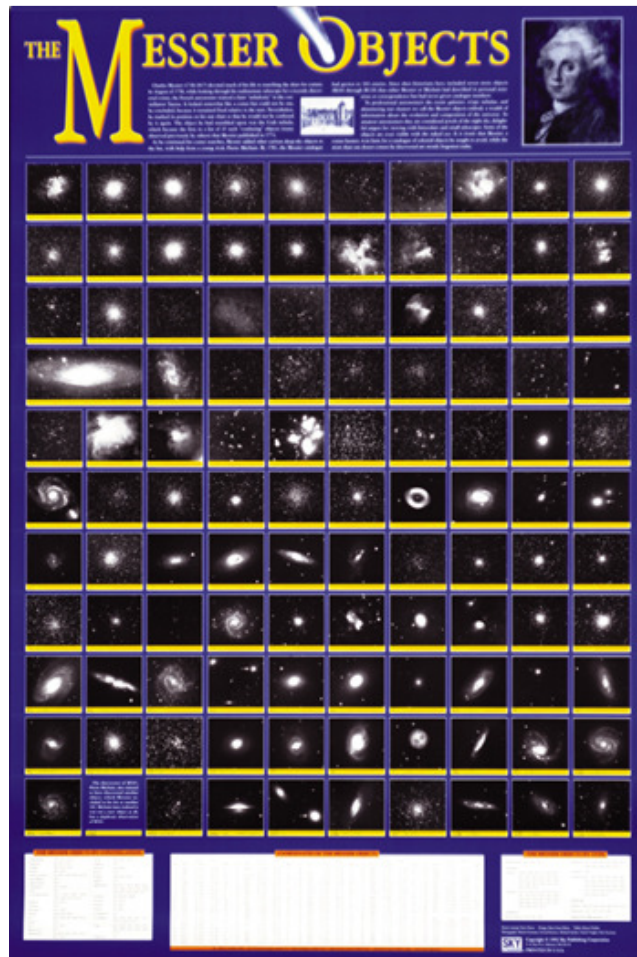
## *The Messier Catalog*

During the years from 1758 to 1782 Charles Messier, a French astronomer (1730 - 1817), compiled a list of approximately 100 diffuse objects that were difficult to distinguish from comets through the telescopes of the day. Discovering comets was the way to make a name for yourself in astronomy in the 18th century -- Messier's first aim was to catalog the objects that were often mistaken for comets.











Fortunately for us, the Messier Catalog became well known for a much higher purpose, as a collection of the most beautiful objects in the sky including nebulae, star clusters, and galaxies. It was one of the first major milestones in the history of the discovery of Deep Sky objects, as it was the first more comprehensive and more reliable list:

Only four or five objects were initially missing because of data reduction errors, which could be figured out later though. Today's versions of the catalogue usually include also later additions of objects observed by Charles Messier and his collegial friend, Pierre Méchain, but not included in his original list.

The study of these objects by astronomers has led, and continues to lead, to important, incredible discoveries such as the life cycles of stars, the reality of galaxies as separate 'island universes,' and the possible age of the universe.





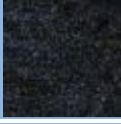



1-10

<a href="#"><u>Messier number</u></a>	<a href="#"><u>NGC number</u></a>	Common name	Picture	Object type	Distance to object in thousands of <a href="#"><u>light years</u></a>	<a href="#"><u>Constellation</u></a>	<a href="#"><u>Apparent magnitude</u></a>
<a href="#"><u>M1</u></a>	NGC 1952	<i>Crab Nebula</i>		<a href="#"><u>Supernova remnant</u></a>	6.3	<a href="#"><u>Taurus</u></a>	9.0
<a href="#"><u>M2</u></a>	NGC 7089			<a href="#"><u>Globular cluster</u></a>	36	<a href="#"><u>Aquarius</u></a>	7.5
<a href="#"><u>M3</u></a>	NGC 5272			Globular cluster	31	<a href="#"><u>Canes Venatici</u></a>	7.0
<a href="#"><u>M4</u></a>	NGC 6121			Globular cluster	7	<a href="#"><u>Scorpius</u></a>	7.5
<a href="#"><u>M5</u></a>	NGC 5904			Globular cluster	23	<a href="#"><u>Serpens</u></a>	7.0
<a href="#"><u>M6</u></a>	NGC 6405	<i>Butterfly Cluster</i>		<a href="#"><u>Open cluster</u></a>	2	Scorpius	4.5
<a href="#"><u>M7</u></a>	NGC 6475	<i>Ptolemy's Cluster</i>		Open cluster	1	Scorpius	3.5
<a href="#"><u>M8</u></a>	NGC 6523	<i>Lagoon Nebula</i>		Cluster with <a href="#"><u>nebula</u></a>	6.5	<a href="#"><u>Sagittarius</u></a>	5.0
<a href="#"><u>M9</u></a>	NGC 6333			Globular cluster	26	<a href="#"><u>Ophiuchus</u></a>	9.0
<a href="#"><u>M10</u></a>	NGC 6254			Globular cluster	13	Ophiuchus	7.5

11-20

<a href="#"><u>Messier number</u></a>	<a href="#"><u>NGC number</u></a>	Common name	Picture	Object type	Distance to object in thousands of <a href="#"><u>light years</u></a>	<a href="#"><u>Constellation</u></a>	<a href="#"><u>Apparent magnitude</u></a>
<a href="#"><u>M11</u></a>	NGC 6705	<i>Wild Duck Cluster</i>		Open cluster	6	<a href="#"><u>Scutum</u></a>	7.0
<a href="#"><u>M12</u></a>	NGC 6218			Globular cluster	18	Ophiuchus	8.0
<a href="#"><u>M13</u></a>	NGC 6205	<i>Great Hercules Cluster</i>		Globular cluster	22	<a href="#"><u>Hercules</u></a>	5.8
<a href="#"><u>M14</u></a>	NGC 6402			Globular cluster	27	Ophiuchus	9.5
<a href="#"><u>M15</u></a>	NGC 7078	<i>Pegasus Cluster</i>		Globular cluster	33	Pegasus	7.5
<a href="#"><u>M16</u></a>	NGC 6611	<i>Eagle Nebula</i>		Cluster with <a href="#"><u>H II region</u></a>	7	Serpens	6.5
<a href="#"><u>M17</u></a>	NGC 6618	<i>Omega Nebula</i>		Cluster with H II region	5	<a href="#"><u>Sagittarius</u></a>	7.0
<a href="#"><u>M18</u></a>	NGC 6613			Open cluster	6	Sagittarius	8.0
<a href="#"><u>M19</u></a>	NGC 6273			Globular cluster	27	Ophiuchus	8.5
<a href="#"><u>M20</u></a>	NGC 6514	<i>Trifid Nebula</i>		Cluster with H II region	2.2	Sagittarius	5.0

## 21-30

<a href="#">Messier number</a>	<a href="#">NGC number</a> (or IC)	Common name	Picture	Object type	Distance to object in thousands of <a href="#">light years</a>	<a href="#">Constellation</a>	<a href="#">Apparent magnitude</a>
<a href="#">M21</a>	NGC 6531			Open cluster	3	Sagittarius	7.0
<a href="#">M22</a>	NGC 6656	<i>Sagittarius Cluster</i>		Globular cluster	10	Sagittarius	6.5
<a href="#">M23</a>	NGC 6494			Open cluster	4.5	Sagittarius	6.0
<a href="#">M24</a>	NGC 6603	<i>Small Sagittarius Star Cloud</i>		<a href="#">Milky Way star cloud</a>	10	Sagittarius	11.5
<a href="#">M25</a>	IC 4725			Open cluster	2	Sagittarius	4.9
<a href="#">M26</a>	NGC 6694			Open cluster	5	Scutum	9.5
<a href="#">M27</a>	NGC 6853	<i>Dumbbell Nebula</i>		<a href="#">Planetary nebula</a>	1.25	Vulpecula	7.5
<a href="#">M28</a>	NGC 6626			Globular cluster	18	Sagittarius	8.5
<a href="#">M29</a>	NGC 6913			Open cluster	7.2	<a href="#">Cygnus</a>	9.0
<a href="#">M30</a>	NGC 7099			Globular cluster	25	<a href="#">Capricornus</a>	8.5


### 31-40

<a href="#">Messier number</a>	<a href="#">NGC number</a>	Common name	Picture	Object type	Distance to object in thousands of <a href="#">light years</a>	<a href="#">Constellation</a>	<a href="#">Apparent magnitude</a>
<a href="#">M31</a>	NGC 224	<i>Andromeda Galaxy</i>		<a href="#">Spiral galaxy</a>	2500	<a href="#">Andromeda</a>	3.5
<a href="#">M32</a>	NGC 221			<a href="#">Dwarf elliptical galaxy</a>	2900	Andromeda	10.0
<a href="#">M33</a>	NGC 598	<i>Triangulum Galaxy</i>		Spiral Galaxy	2590	<a href="#">Triangulum</a>	7.0
<a href="#">M34</a>	NGC 1039			Open cluster	1.4	<a href="#">Perseus</a>	6.0
<a href="#">M35</a>	NGC 2168			Open cluster	2.8	<a href="#">Gemini</a>	5.5
<a href="#">M36</a>	NGC 1960			Open cluster	4.1	<a href="#">Auriga</a>	6.5
<a href="#">M37</a>	NGC 2099			Open cluster	4.6	Auriga	6.0
<a href="#">M38</a>	NGC 1912			Open cluster	4.2	Auriga	7.0
<a href="#">M39</a>	NGC 7092			Open cluster	0.3	Cygnus	5.5
<a href="#">M40</a>		<i>Winnecke 4</i>		<a href="#">Double star</a> WNC4		<a href="#">Ursa Major</a>	9.0



## 41-50

<a href="#"><u>Messier number</u></a>	<a href="#"><u>NGC number</u></a>	Common name	Picture	Object type	Distance to object in thousands of <a href="#"><u>light years</u></a>	<a href="#"><u>Constellation</u></a>	<a href="#"><u>Apparent magnitude</u></a>
<a href="#"><u>M41</u></a>	NGC 2287			Open cluster	2.4	<a href="#"><u>Canis Major</u></a>	5.0
<a href="#"><u>M42</u></a>	NGC 1976	<i>Orion Nebula</i>		<a href="#"><u>H II region</u></a>	1.6	<a href="#"><u>Orion</u></a>	5.0
<a href="#"><u>M43</u></a>	NGC 1982	<i>De Mairan's Nebula</i>		H II region (part of Orion Nebula)	1.6	Orion	7.0
<a href="#"><u>M44</u></a>	NGC 2632	<i>Beehive Cluster</i>		Open cluster	0.5	<a href="#"><u>Cancer</u></a>	4.0
<a href="#"><u>M45</u></a>		<i>Pleiades</i>		Open cluster	0.4	Taurus	1.4
<a href="#"><u>M46</u></a>	NGC 2437			Open cluster	5.4	<a href="#"><u>Puppis</u></a>	6.5
<a href="#"><u>M47</u></a>	NGC 2422			Open cluster	1.6	Puppis	4.5
<a href="#"><u>M48</u></a>	NGC 2548			Open cluster	1.5	<a href="#"><u>Hydra</u></a>	5.5
<a href="#"><u>M49</u></a>	NGC 4472			<a href="#"><u>Elliptical galaxy</u></a>	60000	<a href="#"><u>Virgo</u></a>	10.0
<a href="#"><u>M50</u></a>	NGC 2323			Open cluster	3	<a href="#"><u>Monoceros</u></a>	7.0





## 51-60

<a href="#">Messier number</a>	<a href="#">NGC number</a>	Common name	Picture	Object type	Distance to object in thousands of <a href="#">light years</a>	<a href="#">Constellation</a>	<a href="#">Apparent magnitude</a>
<a href="#">M51</a>	NGC 5194, <a href="#">NGC 5195</a>	<i>Whirlpool Galaxy</i>		Spiral Galaxy	37000	<a href="#">Canes Venatici</a>	8.0
<a href="#">M52</a>	NGC 7654			Open cluster	7	<a href="#">Cassiopeia</a>	8.0
<a href="#">M53</a>	NGC 5024			Globular cluster	56	<a href="#">Coma Berenices</a>	8.5
<a href="#">M54</a>	NGC 6715			Globular cluster	83	Sagittarius	8.5
<a href="#">M55</a>	NGC 6809			Globular cluster	17	Sagittarius	7.0
<a href="#">M56</a>	NGC 6779			Globular cluster	32	<a href="#">Lyra</a>	9.5
<a href="#">M57</a>	NGC 6720	<i>Ring Nebula</i>		Planetary nebula	2.3	Lyra	9.5
<a href="#">M58</a>	NGC 4579			<a href="#">Barred spiral galaxy</a>	60000	Virgo	11.0
<a href="#">M59</a>	NGC 4621			Elliptical galaxy	60000	Virgo	11.5
<a href="#">M60</a>	NGC 4649			Elliptical galaxy	60000	Virgo	10.5




## 61-70

<a href="#"><u>Messier number</u></a>	<a href="#"><u>NGC number</u></a>	Common name	Picture	Object type	Distance to object in thousands of <a href="#"><u>light years</u></a>	<a href="#"><u>Constellation</u></a>	<a href="#"><u>Apparent magnitude</u></a>
<a href="#"><u>M61</u></a>	NGC 4303			Spiral galaxy	60000	Virgo	10.5
<a href="#"><u>M62</u></a>	NGC 6266			Globular cluster	22	Ophiuchus	8.0
<a href="#"><u>M63</u></a>	NGC 5055	<i>Sunflower Galaxy</i>		Spiral galaxy	37000	<a href="#"><u>Canes Venatici</u></a>	8.5
<a href="#"><u>M64</u></a>	NGC 4826	<i>Black Eye Galaxy</i>		Spiral galaxy	12000	Coma Berenices	9.0
<a href="#"><u>M65</u></a>	NGC 3623			Barred spiral galaxy	35000	<a href="#"><u>Leo</u></a>	10.5
<a href="#"><u>M66</u></a>	NGC 3627			Barred spiral galaxy	35000	Leo	10.0
<a href="#"><u>M67</u></a>	NGC 2682			Open cluster	2.25	Cancer	7.5
<a href="#"><u>M68</u></a>	NGC 4590			Globular cluster	32	Hydra	9.0
<a href="#"><u>M69</u></a>	NGC 6637			Globular cluster	25	Sagittarius	9.0
<a href="#"><u>M70</u></a>	NGC 6681			Globular cluster	28	Sagittarius	9.0







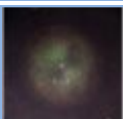
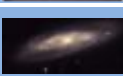


## 71-80

<a href="#">Messier number</a>	<a href="#">NGC number</a>	Common name	Picture	Object type	Distance to object in thousands of <a href="#">light years</a>	<a href="#">Constellation</a>	<a href="#">Apparent magnitude</a>
<a href="#">M71</a>	NGC 6838			Globular cluster	12	<a href="#">Sagitta</a>	8.5
<a href="#">M72</a>	NGC 6981			Globular cluster	53	Aquarius	10.0
<a href="#">M73</a>	NGC 6994			<a href="#">Asterism</a>		Aquarius	9.0
<a href="#">M74</a>	NGC 628			Spiral galaxy	35000	<a href="#">Pisces</a>	10.5
<a href="#">M75</a>	NGC 6864			Globular cluster	58	Sagittarius	9.5
<a href="#">M76</a>	NGC 650, NGC 651	<i>Little Dumbbell Nebula</i>		Planetary nebula	3.4	<a href="#">Perseus</a>	12.0
<a href="#">M77</a>	NGC 1068			Spiral galaxy	60000	<a href="#">Cetus</a>	10.5
<a href="#">M78</a>	NGC 2068			Diffuse nebula	1.6	Orion	8.0
<a href="#">M79</a>	NGC 1904			Globular cluster	40	<a href="#">Lepus</a>	8.5
<a href="#">M80</a>	NGC 6093			Globular cluster	27	Scorpius	8.5




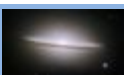

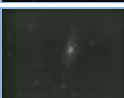

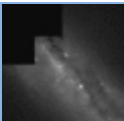


## 81-90

<a href="#"><u>Messier number</u></a>	<a href="#"><u>NGC number</u></a>	Common name	Picture	Object type	Distance to object in thousands of <a href="#"><u>light years</u></a>	<a href="#"><u>Constellation</u></a>	<a href="#"><u>Apparent magnitude</u></a>
<a href="#"><u>M81</u></a>	NGC 3031	<i>Bode's Galaxy</i>		Spiral galaxy	11000	Ursa Major	8.5
<a href="#"><u>M82</u></a>	NGC 3034	<i>Cigar Galaxy</i>		Barred Spiral (?)	11000	Ursa Major	9.5
<a href="#"><u>M83</u></a>	NGC 5236	<i>Southern Pinwheel Galaxy</i>		Barred spiral galaxy	10000	Hydra	8.5
<a href="#"><u>M84</u></a>	NGC 4374			<a href="#"><u>Lenticular galaxy</u></a>	60000	Virgo	11.0
<a href="#"><u>M85</u></a>	NGC 4382			Lenticular galaxy	60000	Coma Berenices	10.5
<a href="#"><u>M86</u></a>	NGC 4406			Lenticular galaxy	60000	Virgo	11.0
<a href="#"><u>M87</u></a>	NGC 4486			Elliptical galaxy	60000	Virgo	11.0
<a href="#"><u>M88</u></a>	NGC 4501			Spiral galaxy	60000	Coma Berenices	11.0
<a href="#"><u>M89</u></a>	NGC 4552			Elliptical galaxy	60000	Virgo	11.5
<a href="#"><u>M90</u></a>	NGC 4569			Spiral galaxy	60000	Virgo	11.0

## 91-100

<a href="#"><u>Messier number</u></a>	<a href="#"><u>NGC number</u></a>	Common name	Picture	Object type	Distance to object in thousands of <a href="#"><u>light years</u></a>	<a href="#"><u>Constellation</u></a>	<a href="#"><u>Apparent magnitude</u></a>
<a href="#"><u>M91</u></a>	NGC 4548			Barred spiral galaxy	60000	Coma Berenices	11.5
<a href="#"><u>M92</u></a>	NGC 6341			Globular cluster	26	<a href="#"><u>Hercules</u></a>	7.5
<a href="#"><u>M93</u></a>	NGC 2447			Open cluster	4.5	Puppis	6.5
<a href="#"><u>M94</u></a>	NGC 4736			Spiral galaxy	14500	Canes Venatici	9.5
<a href="#"><u>M95</u></a>	NGC 3351			Spiral galaxy	38000	Leo	11.0
<a href="#"><u>M96</u></a>	NGC 3368			Spiral galaxy	38000	Leo	10.5
<a href="#"><u>M97</u></a>	NGC 3587	<i>Owl Nebula</i>		Planetary nebula	2.6	Ursa Major	12.0
<a href="#"><u>M98</u></a>	NGC 4192			Spiral galaxy	60000	Coma Berenices	11.0
<a href="#"><u>M99</u></a>	NGC 4254	<i>Coma Pinwheel Galaxy</i>		Spiral galaxy	60000	Coma Berenices	10.5
<a href="#"><u>M100</u></a>	NGC 4321			Spiral galaxy	60000	Coma Berenices	10.5

101-110

<a href="#">Messier number</a>	<a href="#">NGC number</a>	Common name	Picture	Object type	Distance to object in thousands of <a href="#">light years</a>	<a href="#">Constellation</a>	<a href="#">Apparent magnitude</a>
<a href="#">M101</a>	NGC 5457	<i>Pinwheel Galaxy</i>		Spiral galaxy	24000	Ursa Major	8.5
<a href="#">M102</a>	<i>(Actual identification unknown)</i>	<b>Sc - Duplicate of M101</b>		Spiral galaxy		Ursa Major	
<a href="#">M103</a>	NGC 581			Open cluster	8	Cassiopeia	7.0
<a href="#">M104</a>	NGC 4594	<i>Sombrero Galaxy</i>		Spiral galaxy	50000	Virgo	9.5
<a href="#">M105</a>	NGC 3379			Elliptical galaxy	38000	Leo	11.0
<a href="#">M106</a>	NGC 4258			Spiral galaxy	25000	Canes Venatici	9.5
<a href="#">M107</a>	NGC 6171			Globular cluster	20	Ophiuchus	10.0
<a href="#">M108</a>	NGC 3556			Spiral galaxy	45000	Ursa Major	11.0
<a href="#">M109</a>	NGC 3992			Barred spiral galaxy	55000	Ursa Major	11.0
<a href="#">M110</a>	NGC 205			Dwarf elliptical galaxy	2200	Andromeda	10.0