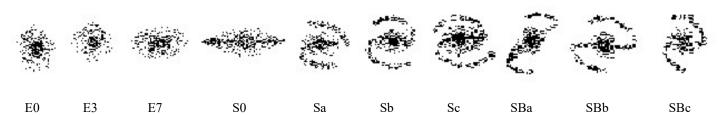
MESSIER COMMENTS

Joseph Wright

1. What type of object is the Messier?

Galaxy (Spiral, Elliptical, Irregular, Barred, Peculiar) Nebula (Dark, Emission, Reflection or Planetary) Cluster (Open, Globular) *GALAXY*

Spiral: a galaxy with gravitational bound stars with rotational symmetry and spiral arm structure. Elliptical: galaxy with gravitational bound stars with rotational symmetry and no spiral arm structure. Barred Spiral: a spiral galaxy with arms protruding from the ends of the galaxy. Peculiar: galaxies that do not fit the other classifications. Irregular: a galaxy without spiral/rotational symmetry with type I stars and abundant gas/dust.



NEBULA

Dark N: a cloud of dust obscuring distant star light and appears as a dark patch (absorption). Emission /Diffuse N: a bright nebula of ionized gas or inter-stellar dust with an emission line spectrum. Planetary N: a thick shell of gas moving out from an extremely hot star/nova. Reflection N: inter-stellar gas or dust illuminated by a near by star.

<u>CLUSTER</u>

Globular: a spherical symmetrical packed group of stars containing up to a million stars. Open: a loose cluster of stars that contains from a few to a few thousand stars.

- 2. Is there any appearance of color? (brightness)
- 3. Can any structural detail be resolved? (shape, size)
- 4. Can individual stars be resolved? (rich/poor in stars, loosely/highly compressed)
- 5. Can any central or illuminating star be seen? (DBL/Binary stars)
- 6. Are any absorption areas present?
- 7. How large does the object appear.
- 8. Are there any features or additional comments to be made.
- 9. Does the object have a particular name?
- 10. What are your thoughts about the object?