



## At the end of these Night Sky activities students will understand:

- How to locate Messier objects in the summer sky
- Messier 13 and 92 are globular star clusters in Hercules
- Messier 27 and 57 are planetary nebulae created by dying stars
- Messier 11 is an example of an open star cluster

## Astronomy background information

The Messier Catalogue is a list of 110 deep space objects created by French astronomer Charles Messier. This activity covers important Messier objects visible in a northern hemisphere summer sky.

Messier 13 and 92 are located in the constellation Hercules and are both globular clusters. These are spherical blobs of hundreds of thousands of old stars which slowly orbit around the Milky Way. Messier 13 is known as the Great Globular Cluster as it is just about visible to the unaided eye.

A “planetary nebula” is a huge expanding cloud of gases blasted out from an old and dying star. Messier 27 and 57 are both planetary nebulae found in summer skies. Messier 57 (also known as the Ring Nebula) is found in Lyra. It is about 2,300 light-years away from us. Messier 27 (also known as the Dumbbell Nebula) is a planetary nebula about 1,360 light-years away in the constellation Vulpecula.

“Open star clusters” are groups of several hundred young stars that formed together. Over time they will gradually move apart. Messier 11 is an example of an open cluster and is estimated to be about 320 million years old.

## Night Sky App Essential Settings

Go to Night Sky Settings  and make sure the following Preferences are set.

### Turn On these Effects:

Real Sky Representation  
Show Constellation Lines  
Enable Messier Objects

### Turn Off these Effects:

Show Satellites  
Daytime Effect  
Show Trajectories and Orbits  
Show Ecliptic Line  
Show Glass Mythology

## Accessible Learning:

- Text size can be increased in the Preferences section
- Star numbers can be reduced by sliding two fingers down the screen

