

# Observing Messier Objects in the Summer Sky - Activities (Ages 8-11)



## Today we are going to investigate:

- Messier Objects in the Summer Sky
- Globular clusters in the constellation Hercules
- Planetary Nebulae in Lyra and Vulpecula
- Messier 11, The Wild Duck Cluster

## Activities

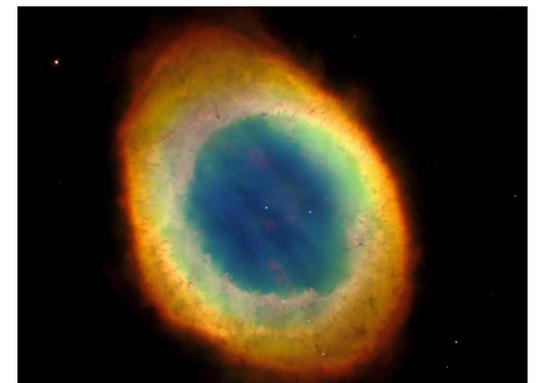
- 1 The Messier catalog is a numbered list of deep space objects created by French astronomer Charles Messier. In this activity we will look for the best Messier objects seen in a northern hemisphere summer sky. One of these is Messier 13, the Great Globular Cluster in Hercules. Start up Night Sky and use the Space Travel tile to change the date to any evening in July and look south. Move the sky with your finger to find Hercules.

**Activity:** Can you locate Messier 13?  
(Tip: Look in the four central stars of Hercules which form a shape called the Keystone)

- 2 Globular clusters are giant spherical groups of about a million stars located very far away from us. Messier 92 is another globular cluster located in Hercules. Find it by going to the midpoint between two upper stars in the Keystone, and looking slightly up.

**Question:** Messier 13 is a brighter cluster than Messier 92.  
True or false?

- 3 The constellation Lyra contains a small but beautiful Messier object. This is Messier 57 which is also known as the Ring Nebula. This is an example of a planetary nebula. Planetary nebulae are structures of glowing gases blasted out from dying stars. Zoom in to locate the Ring nebula.



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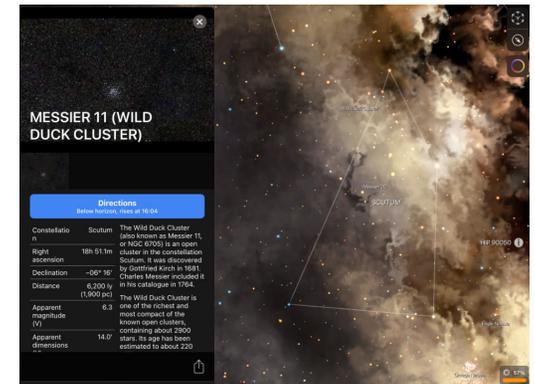
**Question:** Identify the closest named star in Lyra to the Ring Nebula?

4 Messier 27 is another planetary nebula located in the faint constellation Vulpecula. It is also known as the Dumbbell Nebula. Locate Messier 27 by looking below the constellation. When you find Messier 27 tap on the **i** to bring up an Information Tile about this object.

**Question:** Using the Information Tile, what is the other 'fruity' nickname for Messier 27?

5 Find Messier 11, known as the Wild Duck Cluster, in the constellation Scutum. (Tip: you can use the Search function if you need to.) Use the Information Tile **i** to find out more about M11.

**Question:** What type of star cluster is Messier 11?



## What we have discovered:

- The Messier Catalog is a list of deep space objects
- How to locate Messier 13 and Messier 92 in Hercules
- Messier 27 and Messier 57 are planetary nebulae
- A planetary nebula is made of gases released by a dying star

Well done!  
You're a Night Sky  
Superstar!