

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



Today we are going to investigate:

- Messier objects in the fall sky
- Two globular clusters in the Messier catalog
- Two spiral galaxies in the Messier catalog
- Messier 34 in Perseus

Activities

- 1 French astronomer Charles Messier created a numbered list of deep space objects. In this activity we will look for the best Messier objects seen in a northern hemisphere fall (or autumn) sky. Start up Night Sky and use the Space Travel tile to change the date to any evening in November and look south. You will see how the constellation Pegasus dominates the fall sky. Look for the Great Square that represents the belly of the winged horse. It is one of the largest constellations but it has only one Messier object, a globular cluster designated Messier 15.

Activity: Can you locate Messier 15? (Tip: Look a little right to Enif, the star at the nose of Pegasus.)

- 2 A globular cluster is a mass of stars squeezed into a giant ball. We are going to find another fall season globular cluster, designated Messier 2, but this time it is in the constellation Aquarius. To find Messier 2 follow the star Enif straight down towards Aquarius.

Question: What is the closest named star in Aquarius to Messier 2?

- 3 Not all Messier objects are globular clusters. Next, we are going to find a different type of Messier object. Go back to Pegasus and see how the constellation Andromeda is connected to it. Zoom in on the constellation to reveal Messier 31, the Andromeda Galaxy. Galaxies are huge islands of stars, gas and dust.



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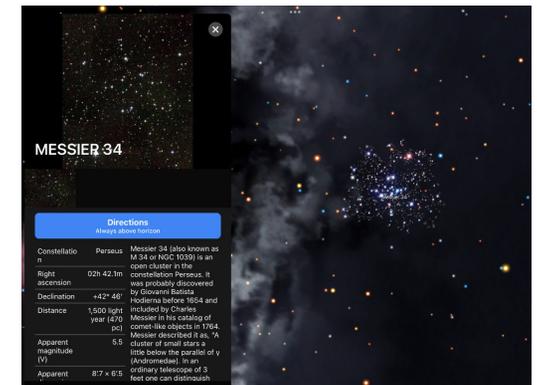
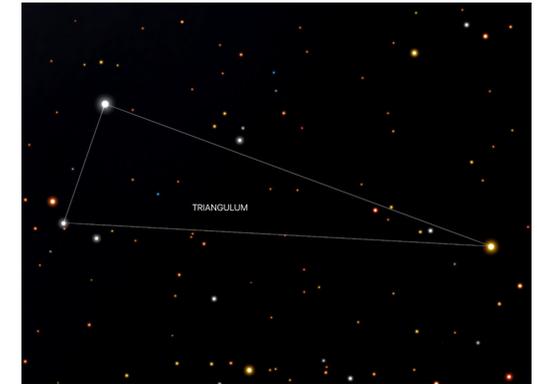
Question: The Andromeda galaxy can be seen with the naked eye
True or False?

- 4 The fall season has another great galaxy located in a very small constellation called Triangulum which is located below Andromeda. Look a little below this constellation and use two fingers to zoom in until you can see Messier 33, the Triangulum Galaxy. Tap on the ⓘ next to its name to bring up the Information Tile.

Question: Using the Information Tile, what is the nickname for Messier 33?

- 5 Finally, we are going to look at another type of Messier object in the constellation of Perseus. This time we are going to use Night Sky Search to find Messier 34. Messier 34 is not a globular cluster it is another type of star cluster. You will see it looks very different from the globular clusters we examined earlier. Tap on the ⓘ next to its name to bring up the Information Tile.

Question: What type of star cluster is Messier 34?



What we have discovered:

- How to find some of the Messier objects that are visible in fall
- Messier 2 and Messier 15 are globular clusters
- Messier 31 and 33 are spiral galaxies
- Messier 34 is located in Perseus

Well done!
You're a Night Sky
Superstar!