

# Exploring Andromeda - Educator's Guide (Ages 8-11)



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

- The constellation Andromeda represents a princess from Greek myths
- Andromeda is immediately beside the constellation of Pegasus
- The constellation's major feature is a large and close galaxy with two small companion galaxies
- The Andromeda galaxy will eventually merge with our own

## Astronomy background information


Andromeda is a faint constellation easiest seen in Fall (or Autumn) skies in the northern hemisphere. In Greek myth Andromeda was a princess who was chained to a rock to appease a sea monster, she was rescued by a hero riding the winged horse Pegasus.

The constellations of Andromeda and Pegasus are actually touching. In fact, the star Alpheratz was traditionally part of Pegasus but in 1923 astronomers decided that this star should be part of Andromeda instead.

Andromeda's most interesting object is the Andromeda Galaxy (also known as Messier 31). This is a spiral galaxy very like our own Milky Way but contains about a trillion stars, about 10 times as many as the Milky Way. Two much smaller galaxies called Messier 32 and 110 orbit around the Andromeda Galaxy.

Messier 31 is the closest large galaxy to us and is about 2.5 million light years away. It is just visible to the unaided eye, making it the furthest object we can see without a telescope. The Andromeda Galaxy is moving towards the Milky Way at 140 km/s and the galaxies will merge together about 3.75 billion years from now.

## 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  
Environment Based Horizon  
Show Glass Mythology  
Show Constellation Lines  
Enable Messier Objects

### Turn Off these Effects:

Show Satellites  
Daytime Effect  
Show Trajectories and Orbits  
Stop Glass Mythology Melting

## Accessible Learning:

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

