# The Summer Triangle - Educator's Guide (Ages 8-11)

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

- Asterisms are simple unofficial star patterns
- The Summer Triangle is a large asterism
- It includes stars from the constellations Cygnus, Lyra and Aguila
- Part of the Milky Way galaxy runs through the Summer Triangle

#### **Astronomy background information**

Three bright and easy to spot stars make up a pattern in the sky called the "Summer Triangle" visible in the northern hemisphere. The Triangle is not a constellation, its stars belong to the constellations Cygnus (the Swan), Lyra (the Lyre) and Aquila (the Eagle). Simple patterns like this are called "asterisms".

Deneb marks the tail of Cygnus (the Swan), a constellation that really looks like a long-necked bird. Deneb is about 1,500 light years away and is the one of the most distant stars visible to the unaided eye.

Vega is the brightest star in the constellation Lyra (the Lyre). It is a very nearby star. Vega is only about 24.3 light years from Earth.

Altair is the brightest star in Aquila (the Eagle). It is even closer to us than Vega, at just 17 light years away from Earth. The pale and wispy band of our galaxy, the Milky Way, runs through the background of the stars of the Summer Triangle.

The Summer Triangle is in the sky throughout the year but cannot be seen in the winter months when it rises in the daytime sky.

#### **Night Sky App Essential Settings**

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

**Turn On these Effects:** 

Day Time Effect
Real Sky Representation
Environment Based Horizon

**Turn Off these Effects:** 

**Show Satellites** 

**Show Trajectories and Orbits** 

**Show Ecliptic Line** 

Show Glass Mythology (at start of activity)

**Show Constellation Lines** 



## **Accessible Learning:**

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

