Exploring Sagittarius - Educator's Guide (Ages 8-11)

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

- Sagittarius is a large constellation in the summer sky
- Sagittarius is one of the Zodiac constellations
- The centre of the Milky Way is located in the direction of Sagittarius
- The supermassive black hole Sagittarius A* is located in this constellation

Astronomy background information

Sagittarius (the Archer) is one of the largest and oldest constellations in the Night Sky. Sagittarius is depicted as a centaur armed with a bow. Lying right across the densest part of the Milky Way it is low in the sky and difficult to observe from the northern hemisphere. Sagittarius is one of the Zodiac constellations as the path of the ecliptic passes through it.

The central part of Sagittarius forms an asterism often known as the "Teapot", Sagittarius is in the direction of the center of the Milky Way Galaxy. Packed with stars, our view of the galactic centre is obscured by clouds of dust and gas in the direction of Sagittarius. Astronomers can see through these clouds with radio, X-ray, gamma ray astronomy and other techniques These led to the discovery of Sagittarius A*. At 26,000 light-years away, this is the closest supermassive black hole to the Sun. Black holes cannot be seen directly as they do not emit light and Sagittarius A* is observed by the radio waves and other radiation emitted by the material being pulled into it.

Night Sky App Essential Settings

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

Turn On these Effects:
Environment Based Horizons
Real Sky Representation
Show Glass Mythology
Stop Glass Mythology Melting
Show Constellation Lines
Stop Text and Lines Disappearing
Enable Messier Objects

Turn Off these Effects:
Show Satellites
Daytime Effect
Show Ecliptic Line (at start of Activity)

Accessible Learning:

- Text size can be increased in the Preferences section

- Star numbers can be reduced by sliding two fingers down the screen

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SATELLITES

Show Satellites [OFF]

EFFECTS

Night Mode (Red) [OFF]

Real Sky Representation [ON]

Show Sky Tags [OFF]

Environment Based Horizons [ON]

Daytime Effect [OFF]

Draw Trajectories and Orbits [OFF]

Show Ecliptic Line [OFF]

Show Glass Mythology [ON]

Stop Glass Mythology Melting [ON]

Show Constellation Lines [ON]

Stop Text and Lines Disappearing [OFF]

7.5 seconds to fade

Enable Messier Objects [ON]