Observing The International Space Station - Educator's Guide (Ages 12-15)

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

- The ISS is visible with the unaided eye
- The Night Sky app can be used to predict when the ISS will be visible
- The ISS takes about 93 minutes to go around the Earth in its orbit
- The main features of the ISS are its solar arrays and modules

Astronomy background information

The International Space Station (ISS) is the largest artificial satellite orbiting the Earth. Its size makes it the easiest satellite to see so it is a good target for first time satellite spotting. The ISS appears as a brilliant point of light moving slowly across the sky.

The ISS takes about 93 minutes to go around the Earth in its orbit. However, for any location the ISS can only be seen at certain times of night and on certain times through the year. There are periods roughly six weeks apart when the ISS makes a series of passes every day through the evening or morning sky. The Night Sky app will indicate when the next visible pass is due and you can see its path through the sky in the app's sky view if you set it to the time and date.

The space station was assembled from a series of modules launched separately into space starting in 1998. It has been occupied continuously since 2000 but was not f nished until 2011. It measures 356 feet (109 m) from end-to-end and is powered by large solar arrays which also help make it stand out in the sky.

Night Sky App Essential Settings

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

Turn On these Ef ects:

Show Satellites Environment Based Horizons Draw Trajectories and Orbits

Turn Of these Ef ects:

Show Starlink Satellites
Show Rocket Bodies
Real Sky Representation
Show Glass Mythology
Show Constellation Lines



Accessible Learning:

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

