Observing The International Space Station - Activities (Ages 12-15)

Today we are going to investigate:

- How to f nd the time and date of the next ISS f yover
- How long the ISS takes to move across the sky
- How long the ISS takes to orbit the Earth
- Features of the ISS

Activities

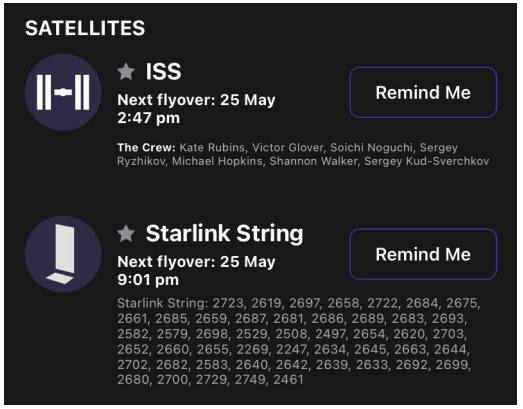
1 Start up Night Sky and open the Main Menu. Find the Tonight tile and tap on it. Scroll down to the Satellites section and see when the next ISS f yover for your location is scheduled. If no time and date are shown this means the ISS is not currently visible from your location, so try this activity again in two weeks' time.

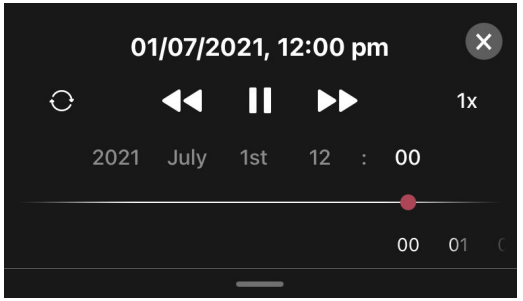
Question: When is the next scheduled ISS f yover?

2 To help you plan your observation tap Back to return to the Main Menu. Find the Space Travel tab and tap on it to open the panel. Set the hour and minute to the time of the next f yover. Use your f nger to move the Sky View so that you are looking towards the western horizon. Tap once on the fast forward button ⏩ to make speed time up (x10). You should now be able to see the ISS moving rapidly across the sky. Tap on the ISS and you will see its orbital path shown with a dashed pink line. Follow the ISS until it touches the horizon again and press the pause button ⏸.

Question: Roughly how long will the ISS take to move across the sky from horizon to horizon?

1 minute 10 minutes 1 hour





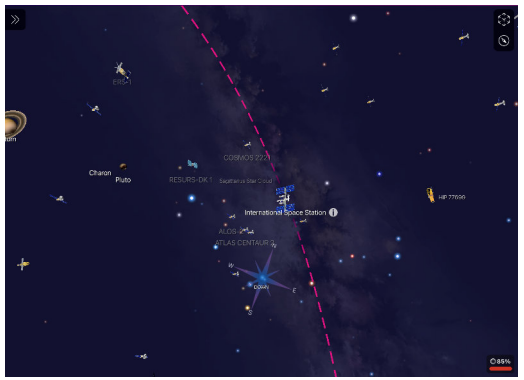
© iCandi Apps Ltd

Observing The International Space Station - Activities (Ages 12-15)

3 Now you are going to f nd out how long it takes the ISS to orbit the Earth. Use the controls on the Space Travel tab to speed up time to x100 and follow the ISS as it moves around the Earth. When it touches the horizon again tap on the pause button ⏸. Tip: to help you track the ISS tap on it to bring back the orbital path on screen.

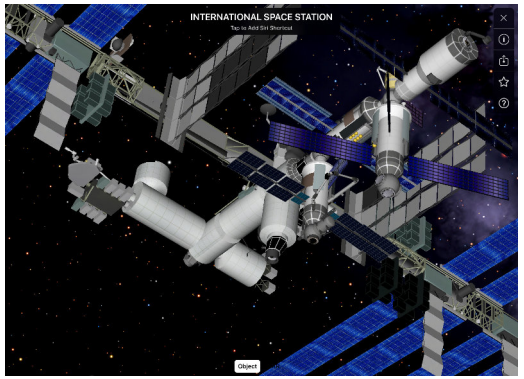
Question: Roughly how long does it take the ISS to orbit the Earth?

9 minutes 90 minutes 9 hours



4 Pause the ISS and double tap on it. This will bring up a 3D model of the ISS which you can rotate with your f ngers. You can zoom in on it to get a better view. You can see its giant solar panels and the modules where the astronauts live and work. There are also several robotic arms that help astronauts move equipment and unload cargo. You can f nd out more about the ISS by tapping on the information button ⓘ.

Question: What year was the f rst module of the ISS launched?



You do not need binoculars or a telescope to see the ISS. In the real sky it just looks like a very bright star moving through the sky. You won't see solar panels or other features as it is so far away.

What we have discovered:

- The ISS is visible with the unaided eye
- You can use Night Sky to f nd when you can see the ISS
- The ISS goes around the Earth in an orbit
- You can use Night Sky to get a 3D close-up of the ISS

© iCandi Apps Ltd