

## ISS Activity #3

### What you need for this activity:

- Access to the internet.
- Scratch paper or a Worksheet for your notes.

### Topic: Journey to the ISS

Currently, astronauts travel to the ISS in a Soyuz module. When the live video shows on your ISS-ABOVE, the rear-facing camera shows two docking stations. The one in the front is the Russian Soyuz module (for transporting astronauts to and from the ISS) and the one at the back is a Russian Progress module (very similar to the Soyuz, but used for resupplying the ISS with food and taking trash away).

### Soyuz launch preparation

Read the article below about the Soyuz and its component parts:

[https://www.nasa.gov/mission\\_pages/station/structure/elements/soyuz/launch.html](https://www.nasa.gov/mission_pages/station/structure/elements/soyuz/launch.html)

### Watch a Soyuz launch

Real-time launch of a manned Soyuz flight to the ISS:

<https://www.youtube.com/watch?v=X5BD8mLa0Nk> (10:12min)

**Follow the docking with the ISS** (you may occasionally see a docking on your ISS-ABOVE).

[https://www.youtube.com/watch?v=scGc1NS\\_IV8](https://www.youtube.com/watch?v=scGc1NS_IV8) (8 min)

### Going home

Sunny climbs into the Soyuz as if she was going home.

<https://youtu.be/SGP6Y0Pnhe4> Start the video at 24:30min (close to the end)

### Undocking and landing

<https://youtu.be/1jAHScJe0u0> (2:51min)

### When is the next Soyuz flying to the ISS?

Find the next Soyuz launch – is it carrying people? What about the one after that?

<https://spaceflightnow.com/launch-schedule/>

## Worksheet

See if you can answer these questions.

1. Where does the Soyuz launch from when it's bringing new crew to the ISS?
2. How many people can it carry?
3. What happens during the flight from the point of take-off?
4. Where is the Soyuz module on the rocket?

There are many other docking points on the ISS, other than the two you can see on the ISS-ABOVE (HDEV) video. There is an additional Soyuz module on the Russian side of the ISS, plus other resupply vehicles.

### The future

In the next year or so, the US will have capability to take astronauts to the Space Station, but it's a race against time, because the contract between NASA and ROSOSMOS (the Russian Space Agency) comes to an end in 2018:

<https://blogs.nasa.gov/commercialcrew/category/international-space-station/>

The good news is that the docking station that will be receive new US Commercial Crew modules from SpaceX and Boeing, was reconfigured in 2016 and will have additions made to it shortly in readiness for test flights in 2018.