



## International Space Station (ISS) Facts

- Construction on the ISS began in 1998 and was built, in space, by 16 different countries over 10 years. It took 35 space shuttle missions and more than 150 spacewalks between 1998 and 2011 to construct. It has been continually occupied since November 2000. Since then, more than 240 individuals from 19 countries have spent time aboard.
- In 2005, Congress designated the U.S. part of the ISS as the nation's newest national laboratory. It is an engineering marvel, is the biggest object ever flown in space, and serves as a microgravity and space environment research lab. Astronauts work on life and plant science experiments that may benefit people living on Earth.
- The ISS travels around the Earth at an average speed of 17, 212 miles per hour and flies 250 miles above the Earth.
- At a speed of 5 miles *per second*, it takes 90 minutes for the ISS to make one complete path, or orbit, around the Earth which is why astronauts on the ISS see about 15 sunrises and sunsets every 24 hours. In one day, the ISS travels the same distance as flying from the Earth to the Moon and back.
- The ISS weighs 460 tons, which is more than 320 automobiles.
- The Space Station is approximately the size of a U.S. football field, or more than 1.5 soccer fields.
- The ISS is made up of many rooms, called modules. Some are used for storage and contain life-support systems; other modules are where the crew works and sleeps. A crew of six people live and work on the ISS for anywhere from several months to a year.
- The Cupola module is a favorite spot for astronauts. It is a 7-window observation area where astronauts can view Earth
- The largest part of the ISS is a central truss (an assembly of beams) on which 16 huge solar panels are attached. More than one acre of solar arrays provide power making it the third-brightest object in the night sky. The ISS is so bright, that it can be seen without a telescope at night. It looks like a fast-moving airplane, but it is many times higher and travels much faster than an airplane.
- The Canadarm2 is a huge, remote-controlled robotic arm that works like a crane. It can be used to help astronauts perform tasks outside of the Station during a spacewalk.

