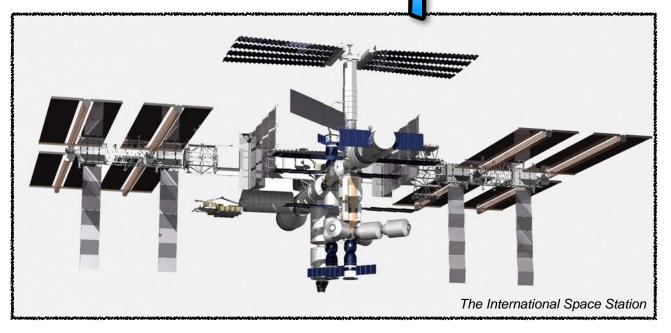
The International Space Station



The International Space Station (ISS) travels in Earth's orbit. The enormous structure is modular (made up of smaller sections which are joined together). The core module was sent into space by a Russian rocket in 1998. The ISS was finally completed in 2011 and it is now the largest man-made object in orbit. The components of the ISS have been launched by Russian and American space shuttles.



The ISS is big enough to cover a football field and weighs almost one million pounds (which is about the same as 330 cars!).

It is divided into two sections, the Russian Orbital Segment and the United States Orbital Segment. Governments around the world have made special agreements about how the ISS can be used.



An astronaut asleep standing up.

The ISS is used as a research laboratory and science lab for the United States, Russia, Japan and Europe. Scientists conduct experiments there, helping them to learn more about biology, human biology, physics, astronomy and meteorology. NASA uses it to understand more about living and working in space (which will help when planning other missions to explore our Solar System and beyond). It is also used to test equipment that is required for missions to The Moon and Mars.

The first crew to inhabit the ISS arrived on November 2, 2000. People have lived on the space station ever since and this is the longest amount of time a human presence has been in space.

The ISS has two bathrooms, a gymnasium and a large bay window. It is able to provide living accommodation for six people at any one time. The outside of the station has large solar arrays on each side to capture energy from The Sun (which is used to generate electricity). There are also large robot arms attached to the exterior. These have helped to build the station and move astronauts around outside.

The ISS remains in orbit with an altitude of 205 and 270 miles and completes 15.54 orbits of the Earth per day.





Questions:

- 1. What does ISS stand for?
- 2. What does 'modular' mean?
- 3. When was the core module of the ISS sent into space?
- 4. Which countries have launched parts of the ISS into space?
- 5. How much does the ISS weigh?
- 6. Describe three ways in which the ISS is used.
- 7. How long have people been living on the ISS?
- 8. How many bathrooms are there on the ISS?
- 9. Where does the ISS' energy supply come from?
- 10. How have the robot arms on the outside been used?
- 11. How many times does the ISS orbit the Earth each day?
- 12. Describe what it might be like living on the ISS.



Questions:

- 1. What does ISS stand for? **International Space Station.**
- 2. What does 'modular' mean?
 - The use of smaller sections to create a larger design.
- 3. When was the core module of the ISS sent into space? 1998.
- 4. Which countries have launched parts of the ISS into space? **Russia and America.**
- 5. How much does the ISS weigh? **Almost one million pounds.**
- 6. Describe three ways in which the ISS is used.
 - a. To conduct experiments (in biology, human biology, physics, astronomy and meteorology),
 - b. To understand more about living and working in space,
 - c. To test equipment for missions to The Moon and Mars.
- 7. How long have people been living on the ISS? **Since 2000.**
- 8. How many bathrooms are there on the ISS? **Two.**
- 9. Where does the ISS' energy supply come from? **From the solar arrays.**
- 10. How have the robot arms on the outside been used?

 To build the station and to move astronauts around.
- 11. How many times does the ISS orbit the Earth each day?

 15.54 times.
- 12. Describe what it might be like living on the ISS.