

## All About the International Space Station

- ⌘ The ISS construction is a collaborative effort between the United States, Russia, Canada, Japan, Belgium, Brazil, Denmark, France, Germany, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland and the United Kingdom.
- ⌘ The Space Station is the largest human occupied object ever sent into space. It includes living and working space that is about the equivalent of two Boeing 747's.
- ⌘ Space Station assembly will require 45 trips from Earth – some from the United States and some from Russia - to carry all of the materials. The station is scheduled to be finished in 2010.
- ⌘ About 90% of people on Earth will be able to see the Space Station in the sky without a telescope once construction is complete.
- ⌘ The Space Station circles the Earth every 90 minutes (it travels 17,500 miles per hour!).
- ⌘ Humans in space don't require as much sleep as humans on Earth because it doesn't take as much effort to perform tasks in space such as lifting heavy objects. Less effort requires less sleep.
- ⌘ The majority of an astronaut's time on the Space Station is spent building and maintaining the station, with time also devoted to science experiments. They work in pairs as many of the experiments require teamwork.
- ⌘ The crew members of the ISS will study protein crystals which will aid in the development of new drugs and treatments for cancer, diabetes, emphysema and immune system disorders.
- ⌘ Experiments and studies aboard the ISS will also include life in low gravity which causes weakening muscles, changes in how the heart, arteries and veins work, and the loss of bone density. These studies are necessary to prepare for future long-term human exploration of the solar system.
- ⌘ Fluids, flames, molten metal and other materials will be researched on the station so that scientists can create better metal alloys and more perfect materials for applications such as computer chips.
- ⌘ Some experiments will take place outside the ISS to study the nature of space. These experiments will help spacecraft designers design better and safer spacecraft in the future.
- ⌘ These exterior studies may also lead to down-to-Earth developments such as clocks that are a thousand times more accurate than today's atomic clocks; better weather forecasting; and stronger materials.