Get On Board the Station
ISS Informational Posters

You and your child will explore what it is like to live and work on the International Space Station by viewing the informational posters.

What You Need:

- 4 sheets of poster board in different colors
- Large print-outs of the questions and answers in the below boxes
- Cover sheets for the answers
- Color images related to the content
- Glue or tape to adhere the information to the posters

What to Do:

Each of the following should be made into a big, bold, colorful poster with related images.

What Do I Breathe?
Imagine living and working in space … what would it be like?

There is no atmosphere in space, so astronauts must carry their air with them in their suits or on the Space Station.

Which Way is Up?
Astronauts live in microgravity on the Space Station. Everything – including them – "floats."

Whew … It's Hot! And Cold!
Our atmosphere helps to keep Earth's temperatures comfortable. Working outside the Space Station where there is no atmosphere could be very hot when you are in the sunlight or very cold when you are in a shadow. Temperatures inside space suits and the Station can be controlled to keep the astronauts comfortable.

Is There a Target Store Near By?
Nope! In space, like when you are camping, you need to take everything! Food, water, shelter, air (okay, usually you don't need air when you camp), tools, a good book to read …

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WHY is the Ice Cream DRY? Food for Thought …
Taking food into space has some special challenges. Can you name some?

In microgravity everything has to be secured in place – what happens if it is not?

Crumbs floating in the International Space Station can cause problems if they get into the wrong place.

Over a long time, food can spoil – just like at home. What do we do to keep food from spoiling?

What sorts of things are we doing on the International Space Station?
There are many different scientific experiments aboard the ISS.

Crystals
Microgravity offers special opportunities for growing crystals so that scientists can better understand their shape and structure and use their knowledge to help fight diseases and make new medicines.

Humans in Space
If humans – like YOU – are going to travel in space, we need to do scientific studies to understand what happens to our bodies in microgravity. How do our bones and muscles adapt? How much should we exercise? What special nutrition do we need?

Food
We also need to be able to support ourselves living and working in space – and that means growing food! How can we best grow lots of crops? Scientists are experimenting with different seeds and light and types of materials for growing.

There are many other experiments taking place aboard ISS to help make life here on Earth better!!

What does it take to build the ISS?
The International Space Station draws upon the scientific resources of 16 nations: Canada, Japan, Russia, 11 nations of the European Space Agency, Brazil, and U.S.A.

Assembly will require 45 trips from Earth to carry all of the materials – 36 launches are planned for the United States and 9 for Russia. The station is scheduled to be finished in 2010.

Possible Poster Images

Images can be found at:

Space Suits
http://www.nasa.gov/images/content/145452main_iss012e19194.jpg

Space Food
http://www.nasa.gov/audience/formedia/presskits/spacefood/factsheets.html

Sleeping in Space
http://liftoff.msfc.nasa.gov/academy/astronauts/sleep.html

Space Walk
http://www.nasa.gov/images/content/152964main_s121e07412_hi_res.jpg

ISS
http://www.nasa.gov/mission_pages/shuttle/shuttlemissions/sts116/launch/sts116_summary .html

Canadian Crane
http://liftoff.msfc.nasa.gov/news/2003/news-canadarm.asp

NASA Space Station Gallery
http://spaceflight1.nasa.gov/gallery/images/station/