



Global Friendship Through Space Education

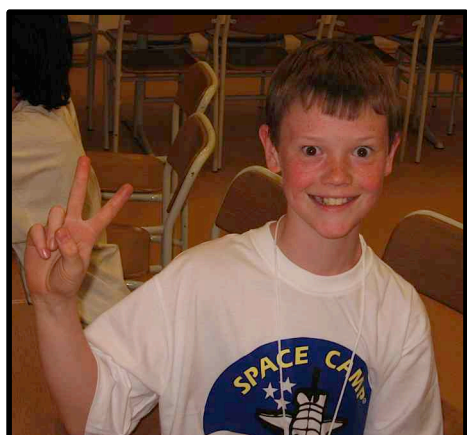
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**ASTRO**

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2008

# Partner School Science Program Newsletter



**WELCOME TO ASTRO, THE  
PARTNER SCHOOL SCIENCE  
PROGRAM NEWSLETTER!**

**EACH WEEK WHEN YOU CHECK  
GFTSE.ORG, YOU WILL FIND  
COOL PICTURES, FUN FACTS,  
SPACE NEWS, AND MORE....**

**TO GET THE MOST OUT OF  
BEING IN THE PARTNER  
SCHOOL SCIENCE PROGRAM,  
MAKE SURE TO SEND  
MESSAGES TO YOUR E-PAL AS  
OFTEN AS YOU CAN!**

**DO YOU HAVE SOMETHING YOU  
WOULD LIKE TO SEE IN ASTRO?  
IF SO, ASK YOUR TEACHER TO  
SEND AN E-MAIL TO  
TYILDIRIM@GFTSE.ORG WITH  
THE PHOTO, STORY, OR LINK.  
YOU MIGHT JUST SEE IT IN  
NEXT WEEK'S ASTRO!**

**TEACHERS CAN SUBMIT  
PICTURES AND STORIES OF  
THEIR CLASS TO BE INCLUDED  
IN THE PARTNER SCHOOL  
SPOTLIGHT SECTION!**

**IN THIS ISSUE:**

**MUSIC AT NASA**

**WHAT IS A SATELLITE?**



# MUSIC AT NASA

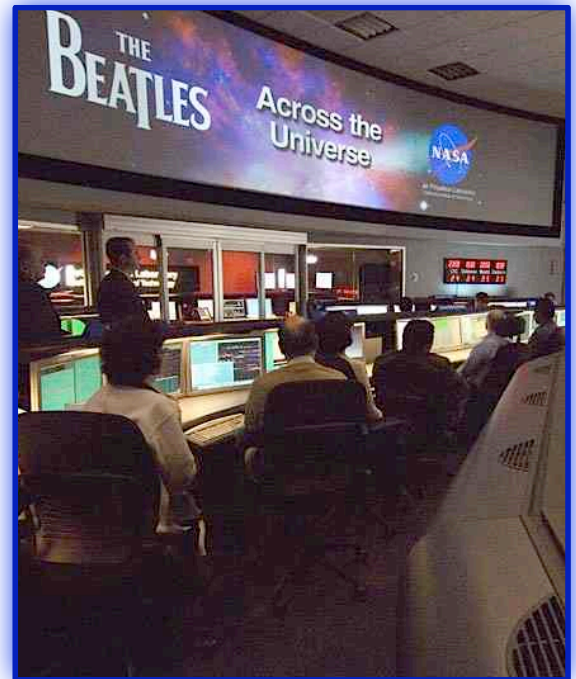
Like here on Earth, music is an important part of life at NASA and life of the astronaut's in Space. Each morning, instead of being woken up by a beeping sound, the Capcom in Mission Control picks a song to wake up the astronauts with. This can be a song a family member requests, or a song that represents what they are doing in space that day. This was first started with the Apollo program and has been a NASA tradition ever since.

This week, NASA has found a new way to spread music through space. NASA was able to beam the Beatles' song "Across The Universe" to celebrate the 50th anniversary of NASA and the launch of the first US satellite Explorer 1, as well as the 40th anniversary of the song "Across The Universe". The song was beamed to the north star, Polaris, and is traveling at 186,000 miles per second (299,337 kilometers per second)!

Several of NASA's astronauts play in an all astronaut band here on earth called Max-Q. They often play free shows at educational events and shuttle launches.



**Astronauts listening to music and playing some themselves!**



**Engineers beaming the song "Across The Universe".**

**To read more and check out a the music video, go to [http://www.nasa.gov/topics/universe/features/across\\_universe.html](http://www.nasa.gov/topics/universe/features/across_universe.html)**

# WHAT IS A SATELLITE?



Everyone always uses the word satellite, but what is it exactly? Well we use the word satellite to mean an object that orbits, or goes around, another object. There are two different types of satellites.

A "natural satellite" is an object that wasn't made by humans and put into space. This can be like our moon, or the moons of the other planets in the solar system.

An "artificial satellite" is what we usually think of when we think of a satellite. These are the electronic satellites put up in space by countries and companies around the world.

Artificial satellites are used to allow people to communicate between nations, they tell airplanes where they are located, and bring TV shows from around the world into your living room!



**This natural satellite, Cassini, orbits the planet Jupiter.**



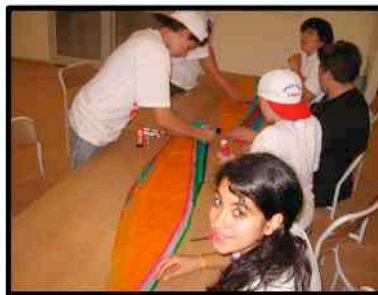
**This artificial satellite, Navstar GPS, allows people and aircraft to know exactly where they are.**

# *SPACE WORDS*

Capcom- a position in NASA's Mission Control at Johnson Space Center in Houston, Texas. Capcom (Capsule Communicator) is an astronaut who takes all the information the engineers and scientists on Earth want to tell those in space and translates it into "astronaut talk" so it's easy for them to understand.

Max-Q- besides being the name of the all astronaut band, Max-Q is short for Maximum Aerodynamic Pressure. This is the most pressure that the Space Shuttle can safely experience. When Max-Q is met during a launch, the astronauts have to slow down, or "throttle back".

**Check back next week for more!**



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