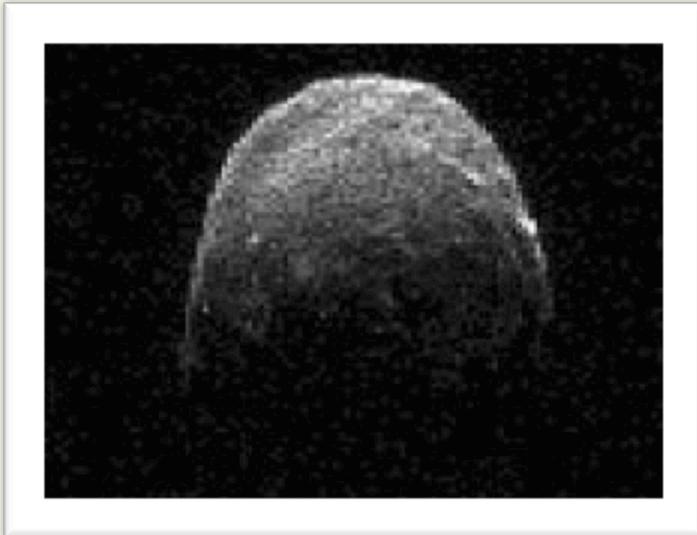




Sarah and Savanna
Camden Middle School
South Carolina
A. Bullock

Asteroid 2005 YU55

The purpose of this asteroid mission is to successfully land on the closest asteroid to Earth as of November 2011. Sending someone to this asteroid could give us vital information on how to destroy an asteroid that could collide with Earth.



**Goldstone Radar image of
Asteroid 2005 YU55.**

Taken November 7, 2011

Family and Friend Contact

Family and friend contact is more for psychological needs than needs to survive up in space. Although a team of astronauts is like a family, each individual wants to keep in contact with their loved ones.



This team of astronauts is similar to the team that would carry out this mission.

Technology used by astronauts to talk to the people in the control room can be used to talk to people all over the United States. Since space does not carry sound waves like Earth does, on-Earth communicating will be difficult, but advanced headphones, speakers and microphones can be used to overcome this inconvenience.



The astronauts will use headphones and microphones to communicate with their family and friends back on Earth.

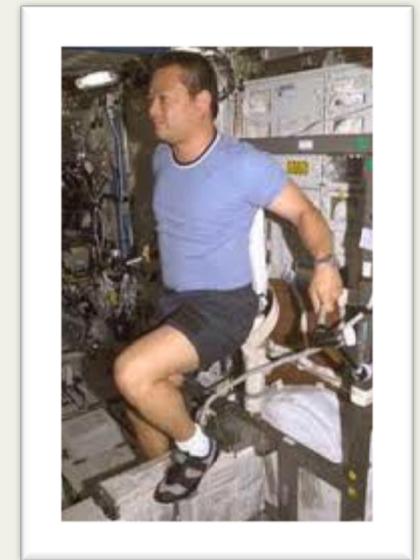
With the numerous satellite that orbit Earth it would be extremely easy for the astronauts to communicate with their friends and family. The astronauts communicate with the people in mission control, so they should communicate with their loved ones. Communicating with their friends and family would release the stress that has built up while on the mission.



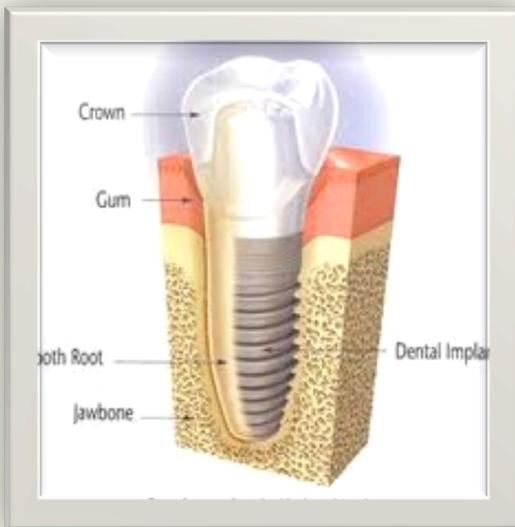
The astronauts could communicate with their families which is important psychologically.

Exercise Capabilities

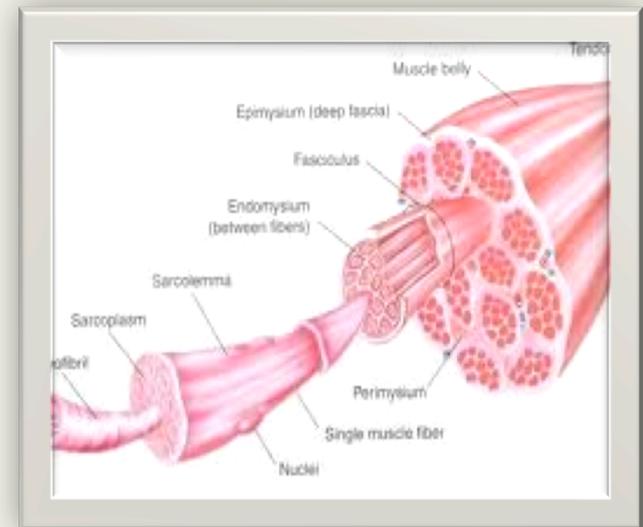
Exercise Capabilities was chosen because in space the lack of gravity and atmosphere is “too easy” on your body which causes you to lose muscle strength and bone mass.



Some challenges that might be encountered are if the astronauts don't exercise for a while they will lose muscle strength and bone mass by as fast as 1% to 2% per month in orbit. Exercising is crucial in space because your body can become weak and then you can no longer go into space and complete other missions.



**Bone
Mass**



Muscle

Exercising is a must for astronauts to stay healthy and functional. Earth has gravity, that gravity works your muscles every time you move. In space, you have to maintain a certain bone mass and muscle strength. If you don't keep up the correct amount of bone mass and muscle strength, you could lose enough strength and then you wouldn't be able to walk because you couldn't hold up your own weight.



In Conclusion

The two topics we have chosen cover the physical and mental health of the astronauts. Keeping in contact with loved one helps put the astronaut's mind at ease. Keep physically fit is one of the most important things to do while up in space.



Bibliography

Heiney, Anna. "Staying Fit - on Earth and in Space."

NASA. 24 June 2004. NASA. 18 March 2012.

[http://www.nasa.gov/missions/science/
f_workout.html](http://www.nasa.gov/missions/science/f_workout.html)

"Exercising in Space." Canadian Space Agency (CSA). 10 August 2009. CSA. 20 March 2012.

[http://www.asc-csa.gc.ca/eng/astronauts/
living_exercising.asp](http://www.asc-csa.gc.ca/eng/astronauts/living_exercising.asp)