

Mission to Titan

To discuss ...

- Where do we think there may be another world with mountains, lakes and oceans..?
 - Titan, the largest moon of Saturn.
- What else about Titan is interesting to scientists..?
 - It has a very thick atmosphere – thicker than Earth's.
 - There's a chance of finding a primitive form of life.
 - May tell us much about how the Earth started out billions of years ago.
- Do scientists think Titan's atmosphere and oceans will be just like ours..?
 - No. They contain a different mixture of chemicals.
(If it rains on Titan, the rain may be liquid "ethane" instead of water.
Any lakes or oceans may also be filled with liquid ethane.)
(It's also very cold on Titan. Ethane is a gas on Earth.)
- Why is it a good idea to use a small probe to land on the surface..? Why not send the mother ship down to the surface..?
 - It's easier. The probe is smaller, lighter, and can land with a parachute.
 - You can leave the probe behind so the mother ship can go other places.
 - It's safer. If the probe sinks in an ocean, the mother ship is still OK.
- Where would you rather go? To a moon like our moon, or a moon like Titan? Why?
 - More to learn..?
 - More mysterious..?
 - More fun..?
 - More dangerous..?

NOTE: After a journey of seven years, the Cassini spacecraft is scheduled to arrive at Saturn in 2004 and send its probe to the surface of Titan in 2005.