



V. Probing Earth and Mars: What should We Pack?

(Finding out temperatures at various landing sites.)

In 1975, NASA, the National Aeronautics and Space Administration, sent 2 satellite probes to Mars. Viking 1 and Viking 2, as they were called, were sent to gather atmospheric and surface weather data. Once they had landed, they were to do soil analyses for signs of life. None were found. In December, 1996, NASA sent a satellite called Pathfinder to Mars for exploration. In July, 1997, Pathfinder sent a probe to the surface that carried a robotic rover called Sojourner, named after the 19th century civil rights leader, Sojourner Truth. Check here more information on [Pathfinder](#).

What if MASA (the Martian Aeronautics and Space Administration) sent spacecraft to the same locations on Earth as the Viking and Pathfinder spacecrafts? What would they find? Use [Ocean Temperatures: Dip, Dip Today?](#) At Gopher Menu Click on "Latest SST Map" to answer some of the questions.

1

Viking 1 landed at 22°N and 28°W.

If Viking 1 landed on Earth at these coordinates of latitude and longitude, where would that be? _____

2

What would the temperature of the surface be at that location on Earth? _____

3

What might happen to the spacecraft when it lands on Earth? What modifications should MASA make to the landing craft?

4

Would the probe be able to detect life on Earth? _____
Intelligence? _____

Explain: _____

5

If the spacecraft had humans aboard, how should they dress for extra-vehicle activity - EVA (going outside the ship)? _____

6

Viking 2 landed at 46°N and 150°E .

If Viking 2 landed on Earth at these coordinates of latitude and longitude, where would that be? _____

7

What would the temperature of the surface be at that location on Earth? _____

8

Would the probe be able to detect life on Earth? _____

Explain: _____

9

Pathfinder landed at 19°N and 33°W .

If Pathfinder landed on Earth at these coordinates of latitude and longitude, where would that be? _____

10

What would the temperature of the surface be at that location on Earth? _____

11

Would the probe be able to detect life on Earth? _____

Explain: _____

12

Why is it that both of the Viking missions and Pathfinder would be water landings if they landed on Earth? _____

13

If the spacecraft had humans aboard, how would they dress for EVA (Extra-Vehicular Activity)? What precautions would they have to make? _____

Want to be a Martian Sun-Times reporter? Write a story using the facts you have learned in this lesson. Choose one of the styles of reporting that your teacher gave you. [Email it to us!](#)