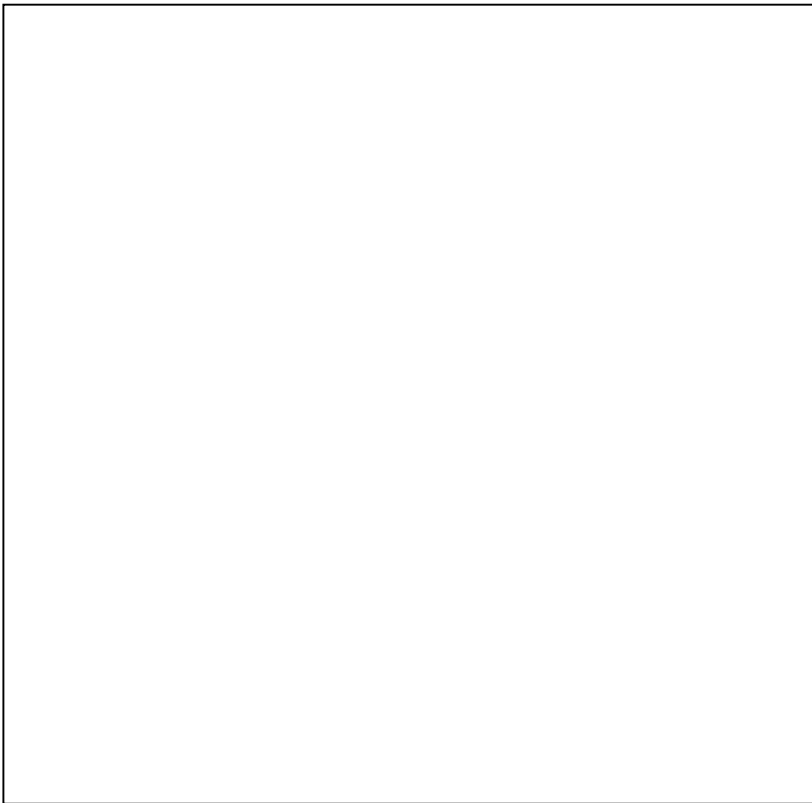


- c. If Titan's atmosphere is only a little thicker than Earth's, and made of nitrogen (which we know we can see through), how would you explain why we cannot see through Titan's atmosphere? Name a US city where a similar atmospheric composition occurs.

MIRANDA, the strange moon of Uranus

Mapping Miranda

1.



- a. Scarp
- b. Old, heavily cratered surface
- c. Young, lightly cratered terrain
- d. Dark, grooved terrain
- e. Craters
- f. Faults

2. Our Moon is about 7 times larger than Miranda. List two features that are similar, and two that are very different.

3. If our Moon looked like Miranda, the Apollo missions would have had a difficult time deciding where to land first. Where would you choose to land for "Miranda Mission 1" (mark it with a big "X" on your map) and why?
4. Two scenarios for the formation of Miranda's characteristics are given in the introduction for Miranda. Which one do you think was the "most likely" one? Support your decision based on your knowledge of the history of the solar system.

TRITON, largest moon of Neptune

The two parts of Triton

1. In your own words, describe the two different regions of Triton.
2. How do we know that Triton has been resurfaced (has a very young surface)?

South pole of Triton

3. How many geysers do you count (an approximate number will do!)?

4. Yellowstone National Park lies over a hot-spot on the Earth. Could these geysers be the result of a "hot-spot" on Triton? Why or why not?

5. Name two other geological features you see on in this image of Triton.

Triton up close

6. What region(s) on our Moon would be similar in origin?

7. What is one major difference between the formation of this plain and those similar features on the Moon?

8. How does the age of this plain on Triton compare to the similar features on the Moon? (Recall the cratering lab and the principle of superposition.) Can we know the exact age of the plain on Titan? Explain your answers.