Physics 102 Venus HW assignment
Astronomy of Planets Due: Feb 28

Questions to turn in:

1. How did we first know that there's no water on Venus?
2. How hot is Venus' surface?
3. How thick is Venus' atmosphere?
4. Is the Venusian surface old or young?
5. Does the Earth's atmosphere have greenhouse gases?
6. Where is the Earth's CO_2?
7. Why does Venus emit radio waves?
8. In what year did some monks see an explosion on the moon?
9. What is the major component of Venus' atmosphere?
10. Which of the four surface geological processes are active on Venus?
11. What is the greenhouse effect?
12. Why is it difficult to image the Venusian surface?
13. Name two ways to get around this problem.
14. What spacecraft mapped the entire Venusian surface?
15. What technique (from #13) did it use?
16. How long does a typical Russian Venera lander last on Venus before it is destroyed?
17. How are features on Venus named?
18. What 2 global problems on Earth were first discovered on Venus?
19. Based on the Astronomy article, name two scientific areas where there is still some controversy over Venus.
20. Name two types of surface features that are unique to Venus. Find images of examples of these features and turn them in.

Questions for discussion:

CP: ch 10 Review Questions #1,3, and 6 and Problem #8, Time out to Think questions on pages 264 and 268, plus

1. What are the most interesting facts you learned about Venus?
2. Did Cosmos tell you anything about comets and the Tunguska event that you didn't already know?
3. What do you think about Sagan's idea that an impact event could cause a nuclear war?
4. What are the 4 things Sagan says we must do to avoid global warming?
5. In what ways is Venus Earth's twin?
6. In what ways is Venus "hell like"?
7. Does Venus have a carbon cycle?
8. Are their active volcanoes on Venus?
9. What is unusual about impact craters on Venus?
10. Sagan states, "both the insignificant and the ordinary are architects of the natural world". What does he mean by this?
11. How does the thickness of the Venusian atmosphere affect surface craters?
12. Can you see Venus in the sky now? What does it look like?
13. How did Russian missions contribute to our current understanding of Venus?
14. What questions do you have about Venus?