COSMOS – Travels in Space and Time

(half sheet of paper OK, short answer OK)

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_

1. What did the Germans see in the Big Dipper?

2. What was Einstein’s job when he discovered Special Relativity?

3. How many light years to the nearest spiral galaxy?

4. How does a whip make a cracking sound?

5. What is the speed of light in the thought experiment?

6. What happens to Paolo as he passes you?

7. What happens to Paolo’s time?

8. What was Leonardo da Vinci’s dream?

9. What does Project Orion use for propulsion?

10. What is the average density of hydrogen in space?

11. How much ship-time passes on a trip to the center of the galaxy in an interstellar ramjet? How much Earth-time passes?

12. Can a Jupiter-like planet form near a star?

13. What do you think Carl means by “a critical branch point in history”?